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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/901,684	07/11/2001	Keiichi Iwamura	862.C2291	8964

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EXAMINER

COLIN, CARL G

ART UNIT	PAPER NUMBER
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2136

DATE MAILED: 03/21/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/901,684

Applicant(s)

IWAMURA, KEIICHI

Examiner

Carl Colin

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 December 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 July 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____. 6) ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 12/30/2005 has been entered.

Response to Arguments

2. In response to communications filed on 12/30/2005, for a request to continue examination, applicant amends claims 1, 4, 5, 6, 8, 10, 11, 14, 15, 16. The following claims 1-16 are presented for examination.

2.1 Applicant's remarks, pages 9-11 filed on 12/30/2005, with respect to the rejection of claims 1-16 have been fully considered and they are persuasive as amended. Although the reference discloses the use of public key, to recover embedded information, absent from the reference is decoding information using error correction coding. Upon further consideration, a new ground of rejection is made.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3.1 **Claims 1-7** are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 6,754,822 to **Zhao** in view of Non-US Patent Publication EP-0933919 A2 to **Iwamura**.

As per claim 1: Zhao discloses an inspection method for inspecting information stored in terminals that are included in a network, comprising the step of: using a program module, which moves between the terminals and determines by using a public key digital watermarking method, whether a digital watermark is embedded in the information. (Col 14, Lines 1-7 & Col 18, lines 32-50). In (Col 19), Zhao suggests way of encrypting/decrypting and monitoring embedded watermark in digital representations. Zhao doesn't explicitly disclose decoding information using error correction coding. However, Iwamura et al. teaches an apparatus for extracting watermark information embedded in digital data using a public key digital watermarking method, wherein said public key digital watermarking method comprises decoding information using error correction coding such that the embedded digital watermark is recovered from the information (Col 9). Therefore, it would have been obvious to a one of ordinary skill in the art at the time the invention was made to modify the system of Zhao with the teaching of Iwamura to

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provide public key digital watermarking method comprising decoding information using error correction coding such that the embedded digital watermark is recovered from the information.

One of ordinary skill in the art would have been motivated to do so because by recovering the embedding watermark from the information even if it is destroyed or altered by an unauthorized user, the copyright of the original information can be protected sufficiently and the reliability and security of the embedded watermark can be improved as suggested by Iwamura (Col 9).

As per claim 2: Zhao discloses the method according to claim 1, wherein when the program module determines that a digital watermark is embedded in the information, the information is downloaded from the terminal to an inspection server. (Col 14, Lines 21-23)

As per claim 3: Zhao discloses the method according to claim 1, wherein when the program module determines that the digital watermark is embedded in the information, the program module then checks, based on the digital watermark, if the user of the terminal is an authentic user of the information.(Col 15, Lines 48-54)

As per claim 4: Zhao discloses an inspection system comprising an inspection host for moving a program module, determines by using a public key digital watermarking method whether a digital watermark is embedded in information stored in a terminal, between terminals that are included in a network. (Col 14, Lines 16-23 & Col 18, lines 32-50)

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As per claim 5: Zhao discloses a recording medium that stores a program module which moves between terminals that are included in a network and determines by using a public key digital watermarking method whether a digital watermark is embedded in information stored in the terminal. (Col 14, Lines 16-23 & Col 18, lines 32-50)

As per claim 6: Zhao discloses an inspection method comprising:

- step of disclosing a part of digital watermark information related to a digital watermark extraction method on a network; (Col 12, Lines 45-53)
- step of installing at least a part of digital watermark information in a terminal which desires the installation of the digital watermark extraction method; (Col 12, lines 53-58)
- inspection step of inspecting authenticity of information in the terminal using the digital watermark information installed in the terminal. (Col 13, Lines 13-19).

As per claim 7: Zhao discloses the method according to claim further comprising a step of informing, information is detected in the copyright protection when illicit use of inspection step, a terminal of the detection via the network (Col 13, Lines 40-46)

4. Claims 15 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 6,141,753 to **Zhao** in view of Non-US Patent Publication EP-0933919 A2 to **Iwamura**.

As per claim 15: Zhao discloses an inspection method comprising: Storage medium providing step of providing storage medium which stores enciphered information embedded with storage

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medium identification information as a digital watermark by using a public key digital watermarking method (Col 6, lines 9-32); a presentation request step requesting the user to present the storage medium identification and user identification information; (Col 6, lines 39-44); a providing step of providing a decipher program of the enciphered information to the user in the presence of the presentation; (Col 7, lines 11-14); an inspection step of inspecting authenticity of information by the user by comparing the user identification information associated with the storage medium identification information, and user information of a terminal that stores the information (Col 10, lines 44-52) the system use the encryption/decryption keys to track software copies and identify who using them). Zhao doesn't explicitly disclose decoding information using error correction coding. However, Iwamura et al. teaches an apparatus for extracting watermark information embedded in digital data using a public key digital watermarking method, wherein said public key digital watermarking method comprises decoding information using error correction coding such that the embedded digital watermark is recovered from the information (Col 9). Therefore, it would have been obvious to a one of ordinary skill in the art at the time the invention was made to modify the system of Zhao with the teaching of Iwamura to provide public key digital watermarking method comprising decoding information using error correction coding such that the embedded digital watermark is recovered from the information. One of ordinary skill in the art would have been motivated to do so because by recovering the embedding watermark from the information even if it is destroyed or altered by an unauthorized user, the copyright of the original information can be protected sufficiently and the reliability and security of the embedded watermark can be improved as suggested by Iwamura (Col 9).

As per claim 16: Zhao discloses an inspection system that sells enciphered information (Col 6, lines 55-58) which is stored in a storage medium and embedded with storage medium identification information as a digital watermark by using a public key digital watermarking method (Col 6, lines 9-32); said system providing decipher software of the enciphered information to a user when the user presents the storage medium identification information and user identification information (Col 6, lines 39-44 and Col 7, lines 11-14), managing the storage medium identification information and user identification information in correspondence with each other (Col 6, Lines 1-9), and Inspecting authenticity information by the user by comparing the user identification information associated with the storage medium identification information embedded as the digital watermark the information, and user information of a terminal that stores the information (Col 6, lines 50-60). Claim 16 also contains the step of decoding and therefore it is rejected on the same rationale as the rejection of claim 15 above.

5. Claims 8-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 6,754,822 to **Zhao** in view of Smith et al. US Patent (6,067,582) and in view of Non-US Patent Publication EP-0933919 A2 to **Iwamura**.

As per claim 8: Zhao discloses an inspection method comprising:

- Step of disclosing a part of digital watermark information related to a -digital watermark extraction technique network; (Col 12, Lines 45-53)

- Zhao doesn't explicitly disclose a step of licensing terminal which included in the network to use the digital watermark extraction method and the step of installing the digital watermark extraction technique in another terminal via use-licensed terminal. However Smith et al. teaches the using of a system to distribute, license, install and monitor the use of software in a network environment (Col 2, lines 18-35 and Col 9, lines 32-44). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the system of Zhao with the teaching of Smith to include a licensing system to license the digital watermark extraction technique and installs it. One ordinary skill in the art would have been motivated to do so in order to determine the usage of individual application in an enterprise network environment, which applications are installed on a network, and which users are using them (Col 2, lines 18-35). Zhao discloses an inspection step of inspecting authenticity of information in the other terminal using the digital watermark extraction method installed the other terminal. (Col 13, Lines 13-19).
- In (Col 19), Zhao suggests way of encrypting/decrypting and monitoring embedded watermark in digital representations. Zhao doesn't explicitly disclose decoding information using error correction coding. However, Iwamura et al. teaches an apparatus for extracting watermark information embedded in digital data using a public key digital watermarking method, wherein said public key digital watermarking method comprises decoding information using error correction coding such that the embedded digital watermark is recovered from the information (Col 9). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Zhao with the teaching of Iwamura to

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provide public key digital watermarking method comprising decoding information using error correction coding such that the embedded digital watermark is recovered from the information.

One of ordinary skill in the art would have been motivated to do so because by recovering the embedding watermark from the information even if it is destroyed or altered by an unauthorized user, the copyright of the original information can be protected sufficiently and the reliability and security of the embedded watermark can be improved as suggested by Iwamura (Col 9).

As per claim 9: Zhao discloses the method according to claim 8 further comprising a step of informing, information is detected in the copyright protection when illicit use of inspection step, a terminal of the detection via the network. (Col 13, Lines 40-46)

As per claim 10: Zhao discloses an inspection system comprising a digital watermarking technique server which disclose a part of digital watermarking extraction technique on a network but doesn't show the method of licensing a terminal which is included in the network to use the digital watermarking technique. However Smith et al. teaches the using of a system to distribute and license software in a network environment (Col 2, lines 18-35). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Zhao with the teaching of Smith to include a step to license the digital watermark extraction technique on the terminals using it. One of ordinary skill in the art would have been motivated to do so in order to determine the usage of individual application in an enterprise network environment, which applications are installed on a network, and which users are using them (Col 2, lines 18-35). Zhao suggests way of encrypting/decrypting and monitoring

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embedded watermark in digital representations. Claim 10 also contains the step of decoding, therefore it is rejected on the same rationale as the rejection of claim 8 above.

As per claim 11: Zhao discloses an inspection method comprising: step of providing digital representation, a technique for protecting the digital representation (Col 17, line 64 through Col 18 line 5) and authenticating the digital representation (Col 18 lines 29-36) but doesn't show the method of accepting the purchase application via the network before sending the digital representation. However Smith et al. teaches the using of a digital content distribution system that accepts a purchase application for any form of digitally stored information stored on the content server (Col 6, lines 23-26), verify user billing information (Col 7, lines 16-21) and transfer the software to the user if the verification process is successful (Col 7, lines 25-28) and require the acceptance of a user agreement before proceeding (Col 5, lines 22-32). Therefore it would have been obvious to a person with ordinary skill in the art at the time the invention was made to modify Zhao system with the teaching of Smith to include a step to accept and verify purchase applications before sending digital representation. One of ordinary skill in the art would have been motivated to do so in order to enable the system to securely distributing software, providing control over software installation and provide a secure billing and user information for the service providers while inhibiting piracy. (Col 2, Lines 18-28). Claim 11 also contains the step of decoding, therefore it is rejected on the same rationale as the rejection of claim 8 above.

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As per claim 12: Zhao discloses the method according to claim 11, wherein the presentation step includes a step of presenting a measure to be taken against the user who illicitly used the information. (Col 16 lines 50-65)

As per claim 13: Zhao discloses the method according to claim 11, wherein the presentation step includes a step of presenting to the user an extraction program which gives an explanation about digital watermark extraction method, and can inspect digital watermark embedded in the information (Col 16, lines 19- 34), and the providing step includes a step of embedding, when identification information of the user is confirmed together with the agreement, the user identification information in the information as a digital watermark, and providing that information to the user (Col 15, lines 48-54).

As per claim 14: Zhao discloses an inspection system comprising an information vendor server that downloads digital representation to a user and require the user to agree on a protection method for the content(Col 17, line 64 through Col 18, line 5) but doesn't show the step of accepting a purchase application of information from a user via a network. However Smith et al. teaches the using of a digital content distribution system that accepts a purchase application for any form of digitally stored information stored on the content server (Col 6, lines 23-26), accept user purchase application via the network (Col 5, lines 56-62) and transfer the software to the user upon acceptance of the license agreement (Col 5, lines 22-32) and providing the information protected by the copyright protecting technique which makes it possible for the user to inspect authenticity of the information, when agreement is confirmed (Col 9, lines 57-66). Therefore it

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would have been obvious to a person with ordinary skill in the art at the time the invention was made to modify Zhao system with the teaching of Smith to. One of ordinary skill in the art would have been motivated to do so in order to enable the system to securely distributing software, providing control over software installation and provide a secure billing and user information for the service providers while inhibiting piracy. (Col 2, Lines 18-28). Claim 14 also contains the step of decoding, therefore it is rejected on the same rationale as the rejection of claim 8 above.

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Carl Colin whose telephone number is 571-272-3862. The examiner can normally be reached on Monday through Thursday, 8:00-6:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz Sheikh can be reached on 571-272-3795. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ce

Carl Colin
Patent Examiner
March 17, 2006

CHRISTOPHER REVAH
PRIMARY EXAMINER

cel 3/18/06